

REMARKS

The Applicants note that the Office Action Summary does not acknowledge the Request for Continued Examination filed on March 22, 2004. Acknowledgment is respectfully requested.

Claims 18-36 are objected to because of certain informalities. The claims are amended to change the term "the conductive layer" to "the first conductive layer" to distinguish the conductive layer from the gate conductive layer. It is believed that the objections to the claims are overcome, and reconsideration is requested.

Claims 28-36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tyson (U.S. Patent Number 5,317,181) in view of Cherne, *et al.* (U.S. Registration Number H1435). In view of the amendments to the claims and the following remarks, the rejections are respectfully traversed, and reconsideration of the rejections is requested.

The claims are amended to recite specific details of the structure of the applicants' claimed semiconductor device. Specifically, the claims are amended to recite that the source electrode includes a metal contact (130c) which provides electrical contact to the body contact region of the invention. In the particular structure set forth in the amended claims, the metal contact is disposed directly over the source of the device. It is believed that these claim amendments clarify the distinctions between the claimed invention and the cited prior art.

Referring specifically to Tyson, there is no teaching or suggestion of a conductive layer formed on a source region, a gate conductive layer and a body contact region and a source electrode formed on the first conductive layer and including a metal contact disposed directly over the source such that it is electrically coupled to the body contact region. Accordingly, Tyson fails to teach or suggest the invention set forth in the claims. Cherne, *et al.* is cited as teaching a gate conductive layer, a source region and a body contact region covered by a (salicide) conductive layer with separated regions. However, Cherne, *et al.* fails to teach or suggest a source electrode formed on a first conductive layer, which is formed on a source region, a gate conductive layer and a body contact region, wherein the source electrode includes a metal contact which is disposed directly over the source region such that the metal contact is

electrically coupled to the body contact region.

Since neither Tyson nor Cherne, *et al.* teaches or suggests the metal contact now set forth in the amended claim, there is no combination of the references which would provide such teaching or suggestion. Accordingly, Tyson and Cherne, *et al.*, taken alone or in combination, fail to teach or suggest the invention set forth in the amended claims. Accordingly, it is believed that the claims are allowable over the references, and reconsideration of the rejections of claims 28-36 under 35 U.S.C. § 103(a) based on Tyson and Cherne, *et al.* is respectfully requested.

Claims 18-27 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tyson in view of Cherne, *et al.* as applied to claims 28-36, and further in view of Bahraman (U.S. Patent Number 5,001,528). In view of the amendments to the claims, the foregoing remarks with regard to the rejections of claims 28-36 based on Tyson and Cherne, *et al.* and the following remarks, the rejections are respectfully traversed, and reconsideration of the rejections is requested.


As discussed above, the claims are amended to recite certain features of the invention, specifically, the metal contact of the invention disposed over the source region of the invention. The combination of Tyson and Cherne, *et al.* fails to teach or suggest the invention set forth in the claims. The Bahraman reference is cited as teaching a device geometry in which a source structure can be symmetrical to a drain structure. However, Bahraman fails to teach or suggest the applicants' claimed source electrode formed on a conductive layer which is formed on a source region, a gate conductive layer and a body contact region, in which the source electrode includes a metal contact disposed directly over the source region such that the metal contact is electrically coupled to the body contact region. This feature of the invention, now set forth in the amended claims, is not taught in any of the Tyson, Cherne, *et al.* and Bahraman references. Accordingly, there is no combination of the references that would provide such teaching or suggestion. Therefore, it is believed that the amended claims are allowable over the cited references, and reconsideration of the rejections of claims 18-27 under 35 U.S.C. § 103(a) based on Tyson, Cherne, *et al.* and Bahraman is respectfully requested.

Application Number 09/994,146
Amendment dated September 21, 2004
Reply to Office Action of May 21, 2004

In view of the amendments to the claims and the foregoing remarks, it is believed that all claims pending in the application are in condition for allowance, and such allowance is respectfully solicited. If a telephone conference will expedite prosecution of the application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

Date: 9/21/04
Mills & Onello, LLP
Eleven Beacon Street, Suite 605
Boston, MA 02108
Telephone: (617) 994-4900
Facsimile: (617) 742-7774
J:\SAM\0274\amendb\amendmentb.wpd


Steven M. Mills
Registration Number 36,610
Attorney for Applicants